# **EXHAUST(H4D0)**

# EX(H4DO)

- 1. General Description
- 2. Front Exhaust Pipe
- 3. Center Exhaust Pipe
- 4. Rear Exhaust Pipe
- 5. Muffler

## **EXHAUST(H4DO)** > General Description

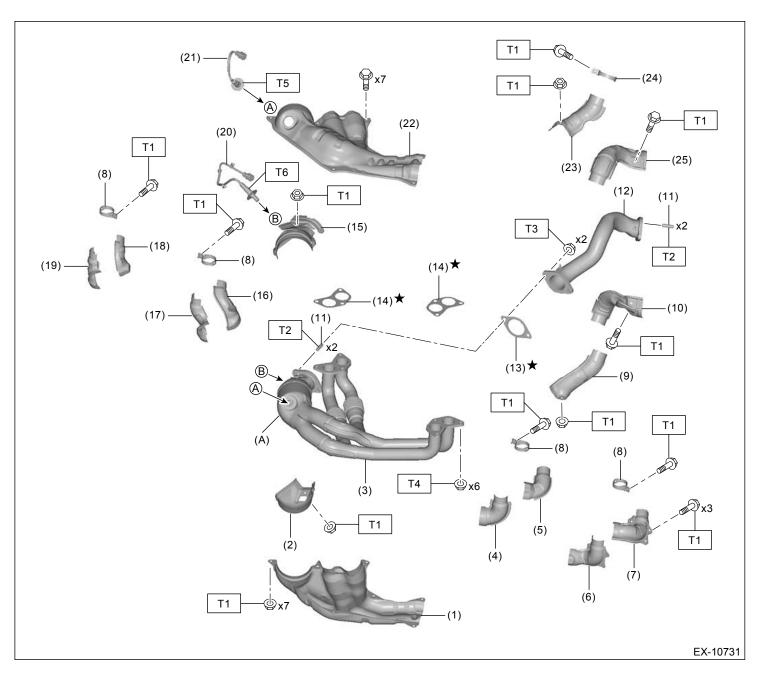
#### **CAUTION**

- When performing service operation, refer to "Repair Contents" in "General Description". <a href="#">Ref. to REPAIR CONTENTS>Repair Contents</a>.
- Prior to starting work, pay special attention to the following:
  - 1. Always wear work clothes, a work cap, and protective shoes. Additionally, wear a helmet, protective goggles, etc. if necessary.
  - 2. Protect the vehicle using a seat cover, fender cover, etc.
  - 3. Prepare the service tools, clean cloth, containers to catch grease and oil, etc.
- Prevent scattering of grease and oil. If it scatters, wipe it off immediately to prevent it from penetrating the floor or flowing out, to protect the environmental.
- If the grease and oil is spilt over the engine, exhaust pipe or the under cover, completely wipe it off to avoid emission of smoke or causing a fire.
- Vehicle components are extremely hot immediately after driving. Be wary of receiving burns from heated parts.
- When performing a repair, identify the cause of trouble and avoid unnecessary work.
- Before disconnecting connectors of sensors or units, be sure to disconnect the ground terminal from the battery sensor.
- Always use the jack-up point when the lifting device, shop jacks or rigid racks are used to support the vehicle.
- Before starting works, remove dirt and corrosion around the target area.
- Keep the removed parts in order and protect them from dust and dirt.
- All removed parts, if to be reused, should be reinstalled in the original positions with attention to the correct directions, etc.
- For the parts except for the non-reusable parts, replace then with new parts if necessary.
- Be sure to tighten bolts and nuts to the specified torque.

## EXHAUST(H4DO) > General Description

#### COMPONENT

#### 1. FRONT EXHAUST PIPE



(A) Front catalytic converter

(1) Exhaust cover (14) Gasket

(2) Exhaust cover (15) Exhaust cover

(3) Front exhaust pipe (16) Exhaust cover

(4) Exhaust cover (17) Exhaust cover

(5) Exhaust cover (18) Exhaust cover

(6) Exhaust cover (19) Exhaust cover

Tightening torque: N·m (kgf-m, ft-lb)

T1: 14 (1.4, 10.3)

T2: 18 (1.8, 13.3)

T3: 42.5 (4.3, 31.3)

T4: 65 (6.6, 47.9)

T5: Ref. to FUEL

INJECTION (FUEL

SYSTEMS)(H4DO)>Front

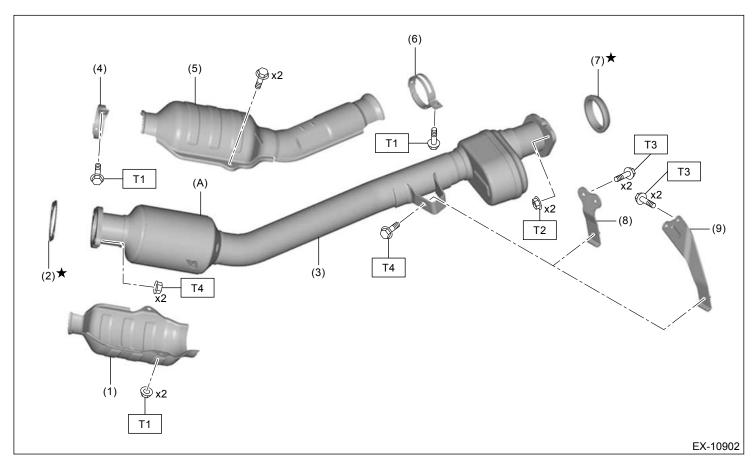
Oxygen (A/F)

Sensor>INSTALLATION.

(7)	Exhaust cover	(20)	Rear oxygen sensor	Т6:	Ref. to FUEL INJECTION (FUEL SYSTEMS)(H4DO)>Rear Oxygen Sensor>INSTALLATION.
(8)	Band	(21)	Front oxygen (A/F) sensor		
(9)	Exhaust cover	(22)	Exhaust cover		
(10)	Exhaust cover	(23)	Exhaust cover		
(11)	Stud bolt	(24)	Band		
(12)	Joint pipe	(25)	Exhaust cover		

(13) Gasket

## 2. CENTER EXHAUST PIPE



- (A) Rear catalytic converter
- (1) Exhaust cover
- (2) Gasket
- (3) Center exhaust pipe
- (4) Band
- (5) Exhaust cover

- (6) Band
- (7) Gasket
- (8) Hanger bracket (MT model)
- (9) Hanger bracket (AT model)

Tightening torque: N·m (kgf-m, ft-lb)

T1: 7 (0.7, 5.2)

T2: 18 (1.8, 13.3)

T3: 23 (2.3, 17.0)

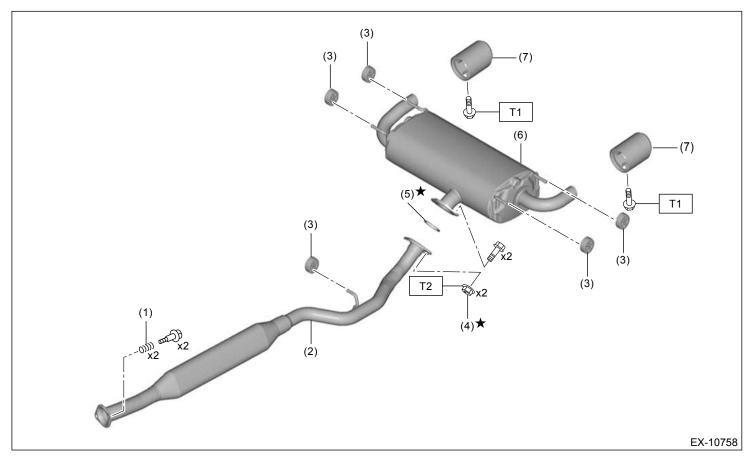
T4: @ Ref. to

EXHAUST(H4DO)>Center

**Exhaust** 

**Pipe>INSTALLATION.** 

## 3. REAR EXHAUST PIPE AND MUFFLER



(1) Spring

(2) Rear exhaust pipe

(3) Cushion rubber

(4) Self-locking nut

(5) Gasket

(6) Muffler

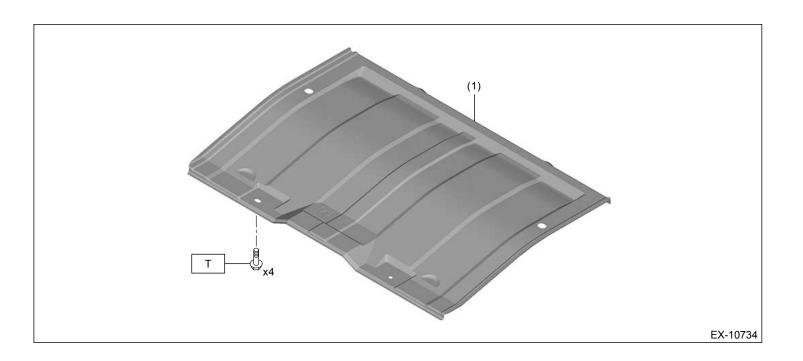
(7) Muffler cutter

Tightening torque: N·m (kgf-m, ft-lb)

T1: 7.5 (0.8, 5.5)

T2: 48 (4.9, 35.4)

## 4. HEAT SHIELD COVER



T: 10 (1.0, 7.4)

# EXHAUST(H4DO) > General Description

## **PREPARATION TOOL**

## 1. SUBARU SPECIAL TOOL

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
ST18632AA020	18632AA020	STAND ASSY	Used for removing and installing the joint pipe.
ST18679AA020	18679AA020	ADJUSTER	<ul> <li>Used for removing and installing the joint pipe.</li> <li>Used together with ENGINE HANGER (99099AJ000).</li> </ul>
ST99099AJ000	99099AJ000	ENGINE HANGER	<ul> <li>Used for removing and installing the joint pipe.</li> <li>Used together with ADJUSTER (18679AA020).</li> </ul>
	12281-38150	NO.1	<ul> <li>Used for removing and installing the joint pipe.</li> <li>Used together with BOLT (90119-14120).</li> </ul>

ST1228138150		
ST9011914120	90119-14120	 <ul> <li>Used for removing and installing the joint pipe.</li> <li>Used together with ENGINE HANGER NO.1 (12281-38150).</li> </ul>

# 2. OTHER

	REMARKS
	Used for removing and installing the joint pipe.
Shackle	Note:
Silackie	Load capacity: Use a shackle with a load
	capacity of 250 kg (551 lb) or more.

## EXHAUST(H4DO) > Front Exhaust Pipe

#### **REMOVAL**





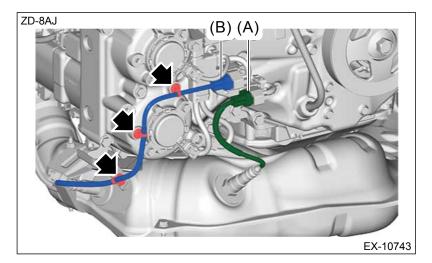


#### 1. FRONT EXHAUST PIPE

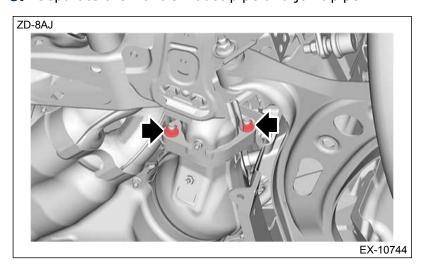
#### Caution:

Vehicle components are extremely hot immediately after driving. Be wary of receiving burns from heated parts.

- 1. Disconnect the ground terminal from battery sensor. Ref. to REPAIR CONTENTS>NOTE > BATTERY.
- 2. Disconnect the connector (A) of the front oxygen (A/F) sensor.
- **3.** Disconnect the connector (B) of the rear oxygen sensor.
- 4. Remove the clip holding the rear oxygen sensor harness.



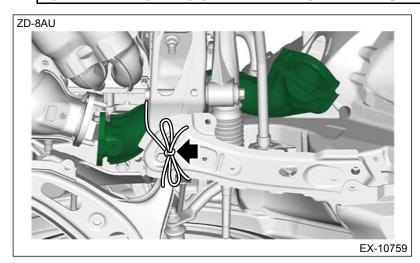
- 5. Remove the center exhaust pipe. <a>Ref. to EXHAUST(H4DO)>Center Exhaust Pipe>REMOVAL.</a>
- **6.** Separate the front exhaust pipe and joint pipe.



**7.** Place the joint pipe aside so that it does not interfere with work and secure the joint pipe to the vehicle with a rope, etc.

#### Note:

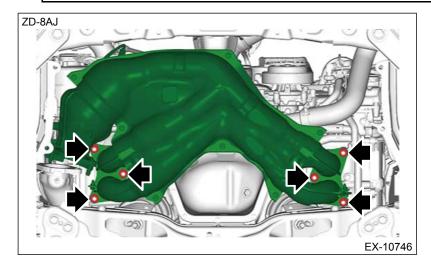
This procedure is necessary to prevent interference between the front exhaust pipe and the joint pipe during installation/removal of the front exhaust pipe. It is also necessary to prevent the joint pipe from falling off during installation/removal of the joint pipe.



8. Remove the front exhaust pipe.

#### Caution:

The front exhaust pipe is very heavy. Be careful not to drop it when removing.



#### 2. JOINT PIPE

#### Caution:

Vehicle components are extremely hot immediately after driving. Be wary of receiving burns from heated parts.

- 1. Fully open the panel COMPL front hood. Ref. to REPAIR CONTENTS>NOTE > STAY ASSEMBLY FRONT HOOD.
- 2. Disconnect the ground terminal from battery sensor. Ref. to REPAIR CONTENTS>NOTE > BATTERY.
- **3.** Perform the steps below to remove the air intake boot, and place it aside so that it does not interfere with the work.

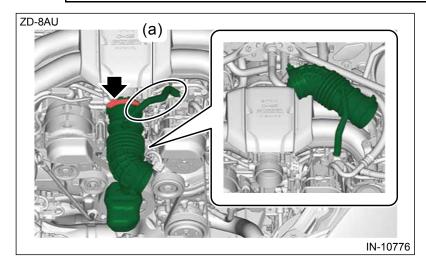
#### Caution:

## Do not disconnect the PCV hose No. 2 (a).

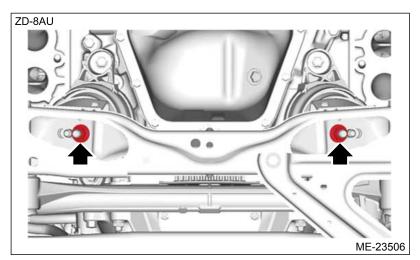
- (1) Remove the air cleaner case. Ref. to INTAKE (INDUCTION)(H4DO)>Air Cleaner Case>REMOVAL.
- (2) Loosen the clamp, remove the air intake boot, and place it aside so that it does not interfere with the work.

#### Caution:

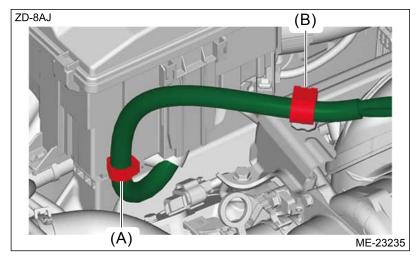
Be careful not to pull out the PCV hose No. 2 (a).



- **4.** Remove the ECM. Ref. to FUEL INJECTION (FUEL SYSTEMS)(H4DO)>Engine Control Module (ECM)>REMOVAL.
- **5.** Remove the front exhaust pipe. Ref. to EXHAUST(H4DO)>Front Exhaust Pipe>REMOVAL > FRONT EXHAUST PIPE.
- **6.** Remove the nuts which secure the engine mounting to the crossmember COMPL front.



- 7. Open the claw of the clip (A) which secures the generator cord to the main fuse box and remove the generator cord.
- 8. Remove the clip (B) securing the generator cord to the fuel pipe protector RH No. 1.

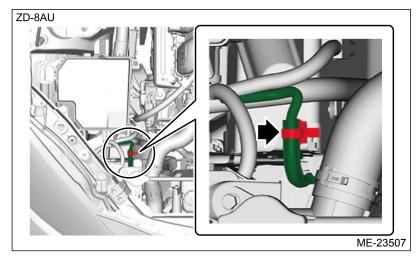


**9.** Remove the clip securing the bulkhead wiring harness to the vehicle.

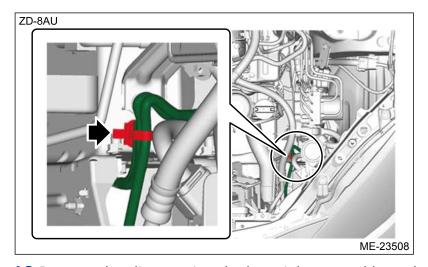
## Note:

This procedure is required to prevent the bulkhead wiring harness from being damaged by the adjuster (ST).

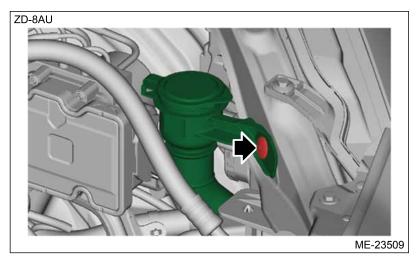
• RH side



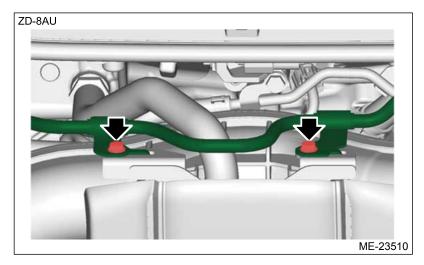
• LH side



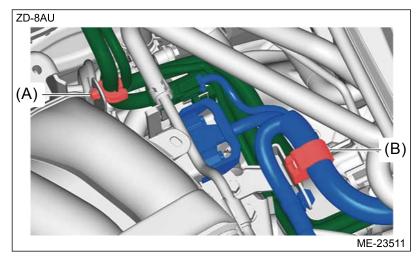
10. Remove the clip securing the hose inlet assembly to the vehicle.



11. Remove the bolts which secure the brake vacuum pipe to the collector cover bracket No. 2.



12. Remove the clip (A) which secures the battery cable assembly to the intake manifold assembly, and remove the clip (B) which secures the bulkhead wiring harness to the engine rear hanger.



- 13. Lift the engine using the ST1, ST2, ST3, ST4, and the shackle, and install the ST5.
  - (1) Using the ST1, install the ST2 to the engine unit.

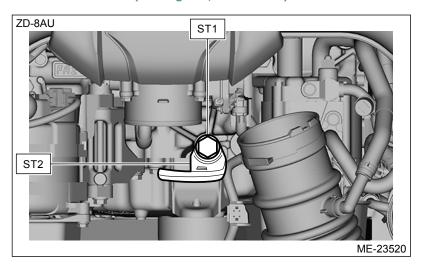
#### **Preparation tool:**

ST1: BOLT (90119-14120)

ST2: ENGINE HANGER NO.1 (12281-38150)

## **Tightening torque:**

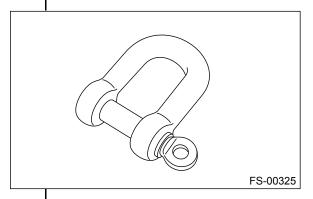
43 N·m (4.4 kgf-m, 31.7 ft-lb)



(2) Set the ST3, ST4, and the shackle to the vehicle.

#### Caution:

• Use a shackle with the load capacity of 250 kg (551 lb) or more.



• Set the ST3, ST4, and the shackle at the locations shown in the figure.

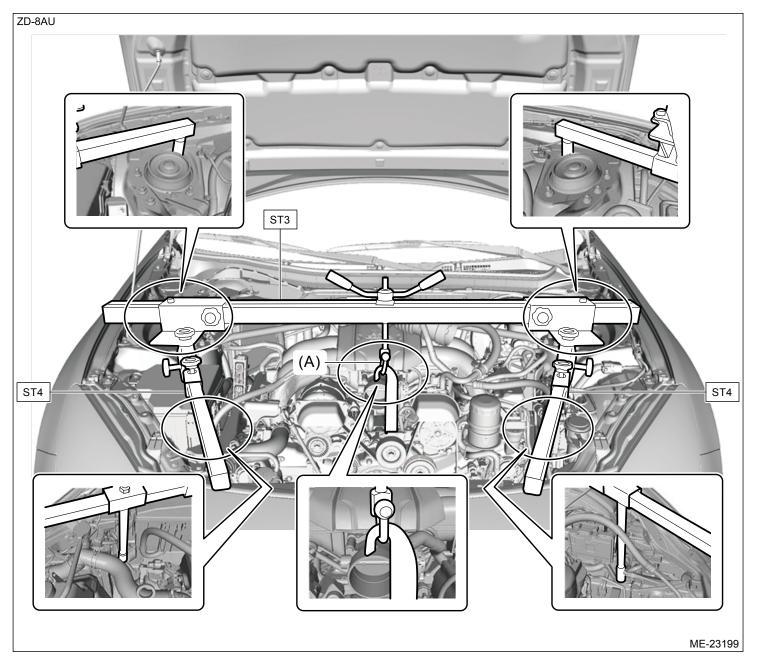
## **Preparation tool:**

ST3: ENGINE HANGER (99099AJ000)

ST4: ADJUSTER (18679AA020)

## **General tool:**

Shackle



#### (A) Shackle

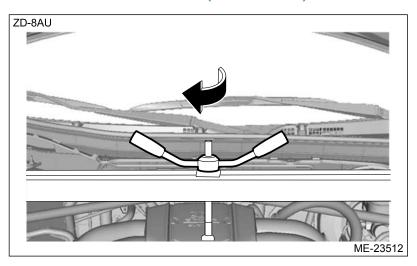
(3) Turn the handle clockwise to lift the engine gradually and set the ST5 between the engine mounting and crossmember COMPL front.

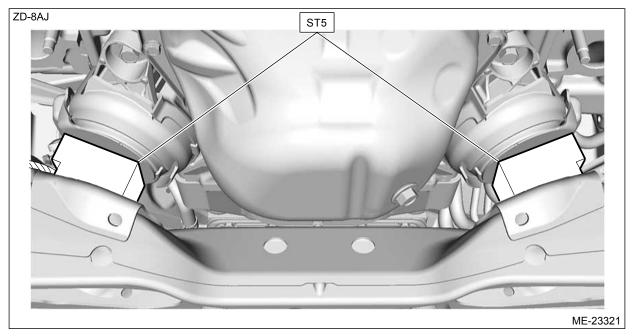
#### **Caution:**

- To prevent damage to the threaded portion of the handle, apply grease or lubricants to the threaded portion before starting the work.
- When lifting up the engine unit, pay attention to the clearance of each part and be careful not to lift the engine too much, in order to prevent damaging the vehicle.
- When the engine unit is lifted, #4 part of the intake manifold assembly and hose pressure suction contact lightly. Insert a cloth, etc. between #4 part of the intake manifold assembly and hose pressure suction for protection.

## **Preparation tool:**

## ST5: STAND ASSY (18632AA020)

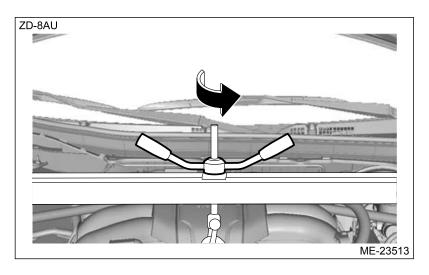


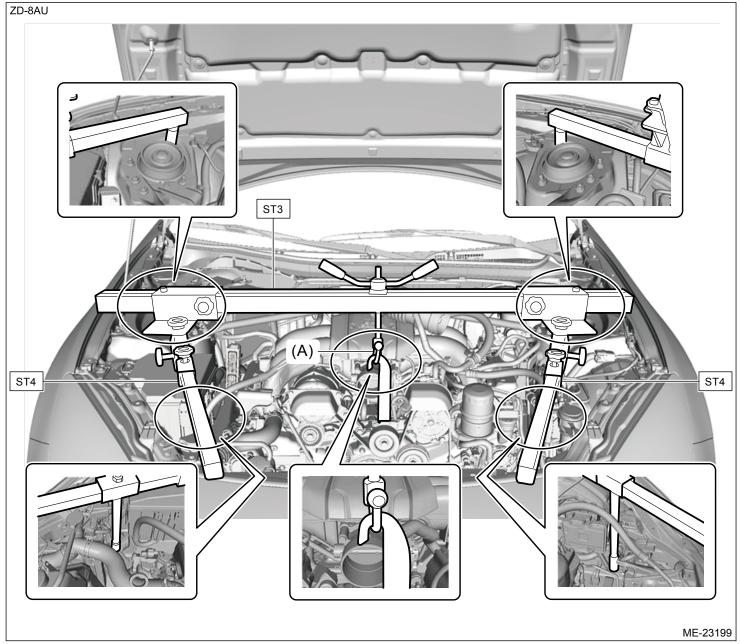


(4) Turn the handle counterclockwise to lower the engine gradually and remove the ST3, ST4, and the shackle.

## Caution:

After lowering the engine, rock the engine to check that the ST5 does not come off.

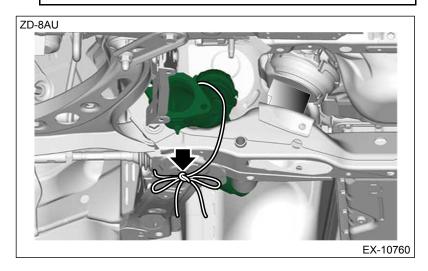




- 14. Remove the ropes or other items used to secure the joint pipe to the vehicle.
- **15.** Remove the joint pipe.

## Note:

Remove it from the rear of the vehicle.



## EXHAUST(H4DO) > Front Exhaust Pipe

## **INSTALLATION**

## 1. FRONT EXHAUST PIPE

1. Using a new gasket, temporarily install the front exhaust pipe.

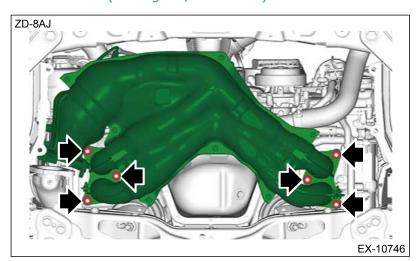
#### Caution:

Be sure to install the front exhaust pipe to the cylinder head.

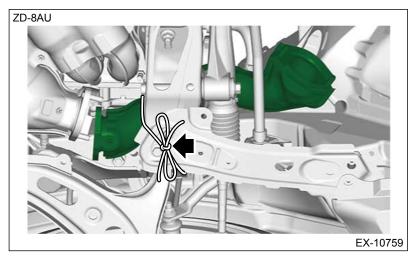
2. Tighten the nuts which hold the front exhaust pipe.

## **Tightening torque:**

65 N·m (6.6 kgf-m, 47.9 ft-lb)



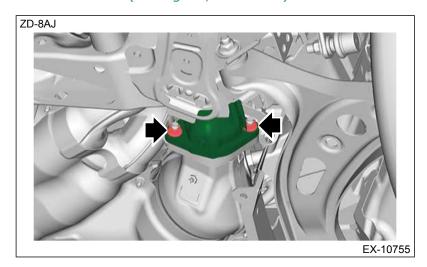
**3.** Remove the ropes or other items used to secure the joint pipe to the vehicle.



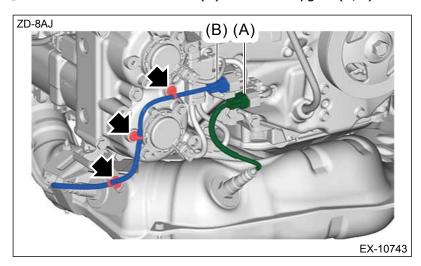
4. Using a new gasket, connect the front exhaust pipe and the joint pipe.

## **Tightening torque:**

42.5 N·m (4.3 kgf-m, 31.3 ft-lb)



- 5. Install the center exhaust pipe. Ref. to EXHAUST(H4DO)>Center Exhaust Pipe>INSTALLATION.
- **6.** Fasten the rear oxygen sensor harness with the clip.
- 7. Connect the rear oxygen sensor connector (B).
- 8. Connect the connector (A) of front oxygen (A/F) sensor.



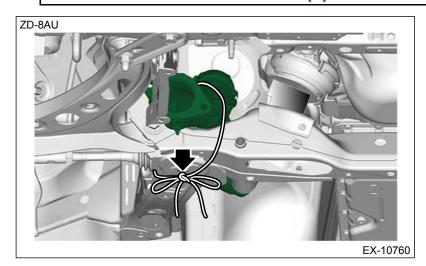
9. Connect the ground terminal to battery sensor. Ref. to REPAIR CONTENTS > NOTE > BATTERY.

#### 2. JOINT PIPE

- 1. Set the joint pipe at a location that does not interfere with the operation.
- **2.** Secure the joint pipe to the vehicle with ropes or other items.

#### Note:

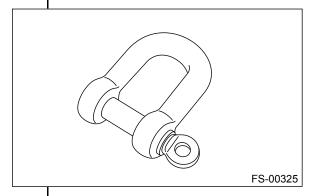
This procedure is necessary to prevent the joint pipe from falling off. It is also necessary to prevent interference between the front exhaust pipe and the joint pipe during installation of the front exhaust pipe.



- 3. Lift the engine using the ST1, ST2, ST3, ST4 and the shackle, and remove the ST5.
  - (1) Set the ST3, ST4, and the shackle to the vehicle.

#### Caution:

• Use a shackle with the load capacity of 250 kg (551 lb) or more.



• Set the ST3, ST4, and the shackle at the locations shown in the figure.

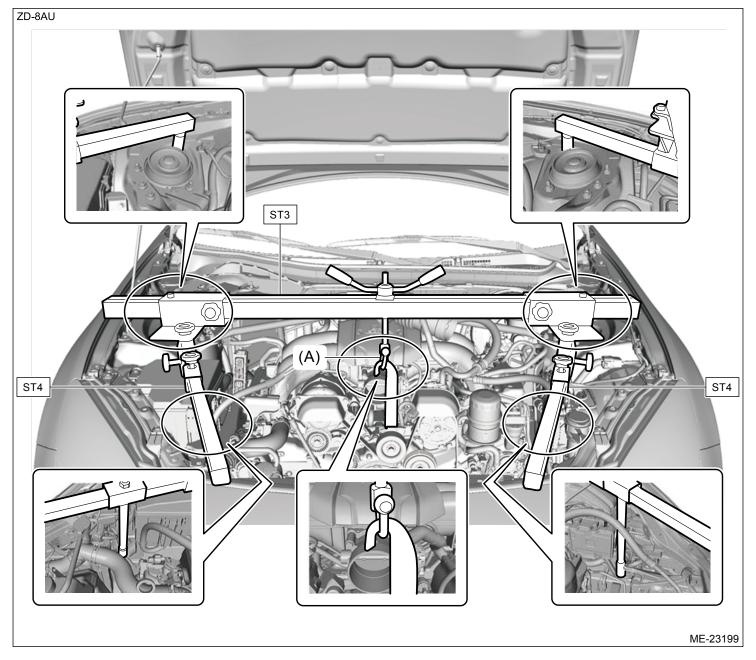
#### **Preparation tool:**

ST3: ENGINE HANGER (99099AJ000)

ST4: ADJUSTER (18679AA020)

## **General tool:**

Shackle

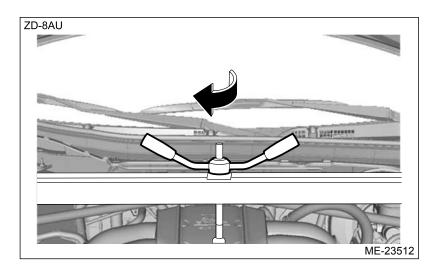


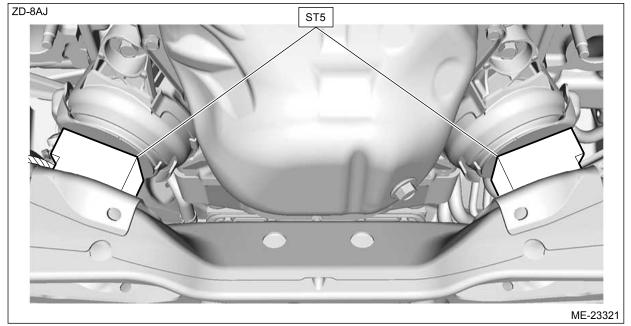
#### (A) Shackle

(2) Turn the handle clockwise to lift the engine gradually and remove the ST5.

## Caution:

- To prevent damage to the threaded portion of the handle, apply grease or lubricants to the threaded portion before starting the work.
- When lifting up the engine unit, pay attention to the clearance of each part and be careful not to lift the engine too much, in order to prevent damaging the vehicle.

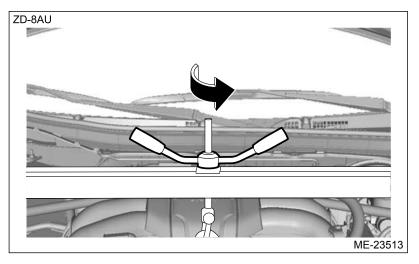




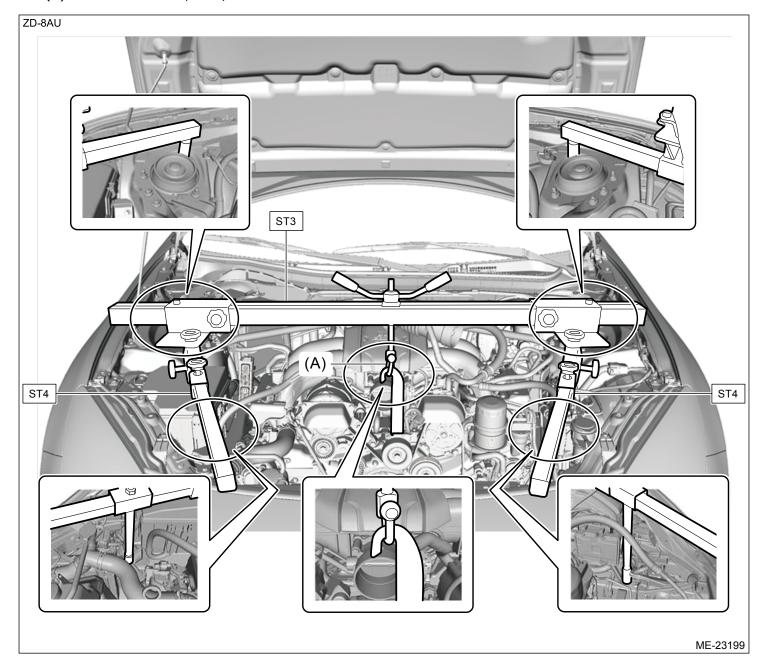
(3) Turn the handle counterclockwise to lower the engine gradually and insert the stud bolt of the engine mounting into the engine mounting hole of the crossmember COMPL front.

#### Note:

- If it is hard to insert the stud bolt of the engine mounting into the engine mounting hole of the crossmember COMPL front, lower the engine while lightly pushing it toward the rear of the vehicle.
- Check that the stud bolt of the engine mounting is securely inserted into the engine mounting hole of the crossmember COMPL front.

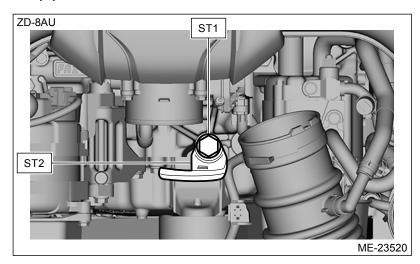


(4) Remove the ST3, ST4, and the shackle from the vehicle.

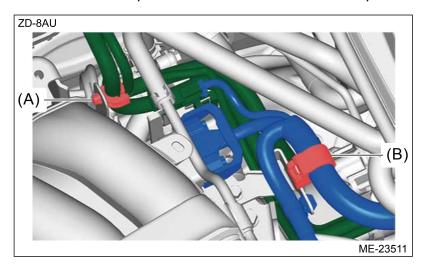


#### (A) Shackle

(5) Remove the ST1 and ST2.

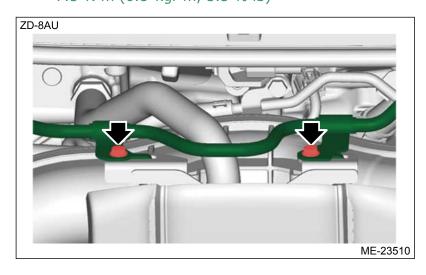


**4.** Secure the bulkhead wiring harness to the engine rear hanger with clip (B), and secure the battery cable assembly to the intake manifold assembly with clip (A).

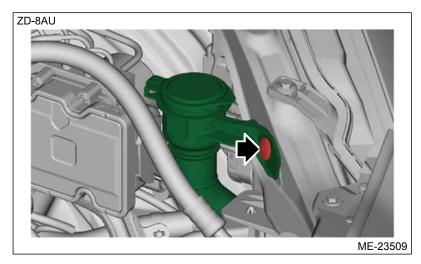


5. Install the bolts which secure the brake vacuum pipe to the collector cover bracket No. 2.
Tightening torque:

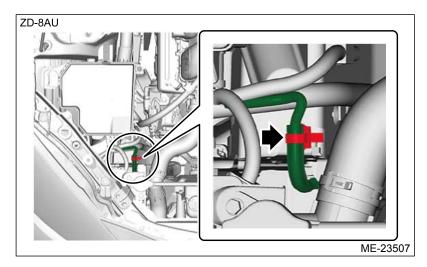
7.5 N·m (0.8 kgf-m, 5.5 ft-lb)



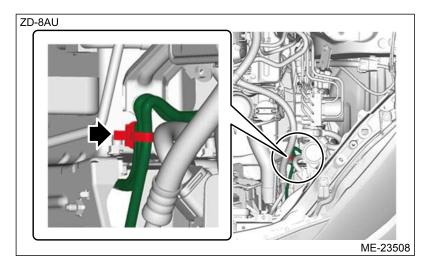
**6.** Secure the hose inlet assembly to the vehicle with the clip.



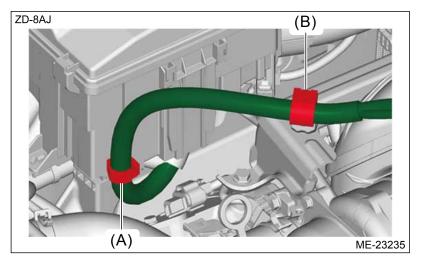
- 7. Secure the bulkhead wiring harness to the vehicle with the clip.
  - RH side



• LH side



**8.** Secure the generator cord to the fuel pipe protector RH No. 1 with clip (B), and secure the generator cord to the main fuse box with clip (A).



**9.** Install the nuts which hold the engine mounting to the crossmember COMPL front.

#### Caution:

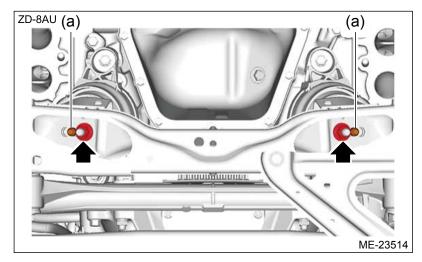
Be sure to use a new nut.

#### Note:

Make sure that locators (a) of the engine mounting are securely inserted.

#### **Tightening torque:**

90 N·m (9.2 kgf-m, 66.4 ft-lb)



- **10.** Install the front exhaust pipe. Ref. to EXHAUST(H4DO)>Front Exhaust Pipe>INSTALLATION > FRONT EXHAUST PIPE.
- **11.**Install the ECM. Ref. to FUEL INJECTION (FUEL SYSTEMS)(H4DO)>Engine Control Module (ECM)>INSTALLATION.
- 12. Install the air intake boot. Ref. to INTAKE (INDUCTION)(H4DO)>Air Intake Boot>INSTALLATION.
- 13. Connect the ground terminal to battery sensor. Ref. to REPAIR CONTENTS > NOTE > BATTERY.
- **14.** Set the panel COMPL front hood to the normal position. Ref. to REPAIR CONTENTS>NOTE > STAY ASSEMBLY FRONT HOOD.
- **15.** Check the select lever and adjust it if necessary. (AT model)

#### **Inspection:**

Ref. to CONTROL SYSTEMS>Select Lever>INSPECTION.

#### **Adjustment:**

Ref. to CONTROL SYSTEMS>Select Lever>ADJUSTMENT.

#### Note:

This procedure is required because the select lever may be deviated from the adjusted position due to installation/removal of the nut on the engine mounting.

EXHAUST(H4DO) > Front Exhaust Pipe

#### **DISASSEMBLY**

#### 1. FRONT EXHAUST PIPE

1. Remove the front oxygen (A/F) sensor and rear oxygen sensor.

Front oxygen (A/F) sensor:

Ref. to FUEL INJECTION (FUEL SYSTEMS)(H4DO)>Front Oxygen (A/F) Sensor>REMOVAL.

Rear oxygen sensor:

Ref. to FUEL INJECTION (FUEL SYSTEMS)(H4DO)>Rear Oxygen Sensor>REMOVAL.

**2.** Remove each exhaust cover and each stud bolt. Ref. to EXHAUST(H4DO)>General Description>COMPONENT > FRONT EXHAUST PIPE.

#### 2. JOINT PIPE

Remove each exhaust cover and each stud bolt. Ref. to EXHAUST(H4DO)>General Description>COMPONENT > FRONT EXHAUST PIPE.

EXHAUST(H4DO) > Front Exhaust Pipe

#### **ASSEMBLY**

#### 1. FRONT EXHAUST PIPE

- 1. Install each exhaust cover and each stud bolt. Ref. to EXHAUST(H4DO)>General Description>COMPONENT > FRONT EXHAUST PIPE.
- 2. Install the front oxygen (A/F) sensor and rear oxygen sensor.

Front oxygen (A/F) sensor:

Ref. to FUEL INJECTION (FUEL SYSTEMS)(H4DO)>Front Oxygen (A/F)
Sensor>INSTALLATION.

Rear oxygen sensor:

Ref. to FUEL INJECTION (FUEL SYSTEMS)(H4DO)>Rear Oxygen Sensor>INSTALLATION.

#### 2. JOINT PIPE

Install each exhaust cover and each stud bolt. Ref. to EXHAUST(H4DO)>General Description>COMPONENT > FRONT EXHAUST PIPE.

EXHAUST(H4DO) > Front Exhaust Pipe

#### **INSPECTION**

1. Check that no leaks are found.

- 2. Check for deformation, damage, or excessive rusting.
- **3.** Check for any foreign matter adhered.
- 4. Check for clogging.

## EXHAUST(H4DO) > Center Exhaust Pipe

#### **REMOVAL**

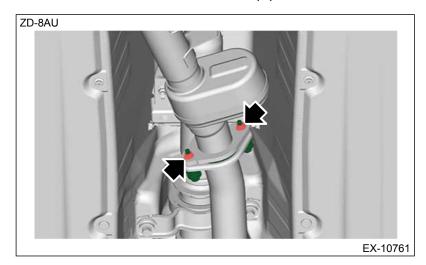




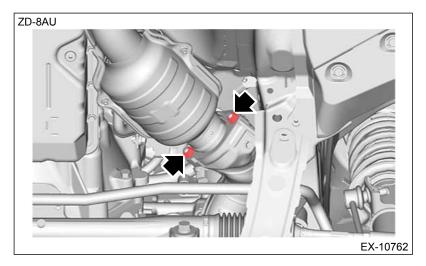
#### Caution:

Vehicle components are extremely hot immediately after driving. Be wary of receiving burns from heated parts.

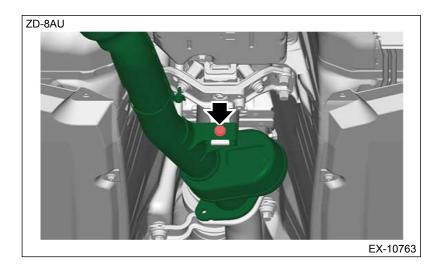
- 1. Remove the under cover front and the under cover COMPL front T/M. Ref. to EXTERIOR/INTERIOR TRIM>Front Under Cover>REMOVAL.
- **2.** Remove the sub frame front LWR C COMPL RH. Ref. to FRONT SUSPENSION>Sub Frame>REMOVAL.
- **3.** Disconnect the center exhaust pipe and the rear exhaust pipe.



4. Disconnect the joint pipe and the center exhaust pipe.



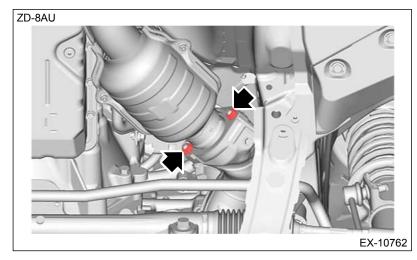
**5.** Remove the bolt which holds center exhaust pipe to hanger bracket, and remove the center exhaust pipe.



# EXHAUST(H4DO) > Center Exhaust Pipe

## **INSTALLATION**

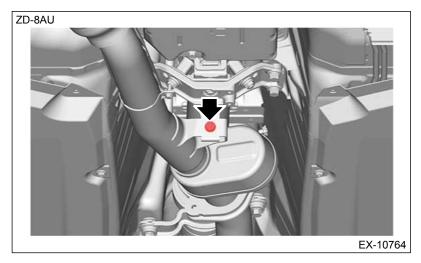
- 1. Set the center exhaust pipe using a new gasket.
- 2. Temporarily tighten the nuts which connect the joint pipe and the center exhaust pipe.



**3.** Install the bolt which holds the center exhaust pipe to the hanger bracket.

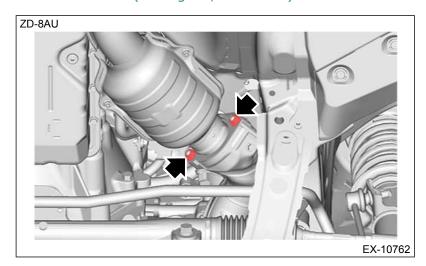
## **Tightening torque:**

50 N·m (5.1 kgf-m, 36.9 ft-lb)



4. Tighten the nuts which connect the joint pipe and the center exhaust pipe.
Tightening torque:

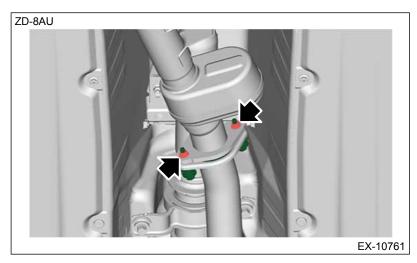
42.5 N·m (4.3 kgf-m, 31.3 ft-lb)



**5.** Connect the center exhaust pipe and the rear exhaust pipe.

## **Tightening torque:**

18 N·m (1.8 kgf-m, 13.3 ft-lb)



**6.** Install the sub frame front LWR C COMPL RH. Ref. to FRONT SUSPENSION>Sub Frame>INSTALLATION.

7. Install the under cover front and the under cover COMPL front T/M. Ref. to EXTERIOR/INTERIOR TRIM>Front Under Cover>INSTALLATION.

EXHAUST(H4DO) > Center Exhaust Pipe

#### **DISASSEMBLY**

Remove each exhaust cover. Ref. to EXHAUST(H4DO)>General Description>COMPONENT > CENTER EXHAUST PIPE.

EXHAUST(H4DO) > Center Exhaust Pipe

#### **ASSEMBLY**

Install each exhaust cover. Ref. to EXHAUST(H4DO)>General Description>COMPONENT > CENTER EXHAUST PIPE.

EXHAUST(H4DO) > Center Exhaust Pipe

#### INSPECTION

- 1. Check that no leaks are found.
- 2. Check for deformation, damage, or excessive rusting.
- 3. Check for any foreign matter adhered.
- 4. Check for clogging.

## EXHAUST(H4DO) > Rear Exhaust Pipe

#### **REMOVAL**

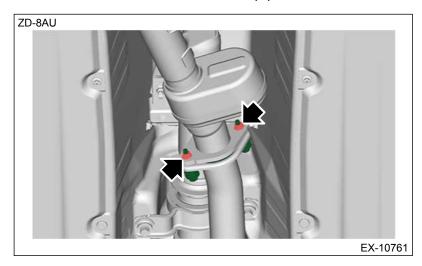




#### Caution:

Vehicle components are extremely hot immediately after driving. Be wary of receiving burns from heated parts.

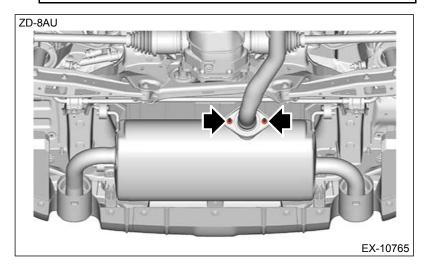
1. Disconnect the center exhaust pipe and the rear exhaust pipe.



2. Disconnect the rear exhaust pipe and muffler.

#### Caution:

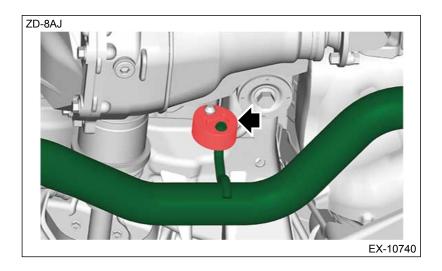
Be careful not to drop the rear exhaust pipe.



- **3.** Apply a coat of spray type lubricant to the mating area of cushion rubber.
- 4. Remove the rear exhaust pipe.
- 5. Remove the cushion rubber.

#### Note:

Perform this procedure only when required.



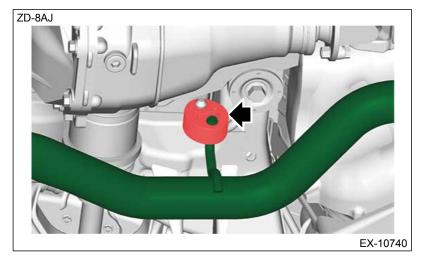
## EXHAUST(H4DO) > Rear Exhaust Pipe

## **INSTALLATION**

- 1. Apply a coat of spray type lubricant to the mating area of cushion rubber.
- 2. Install the cushion rubber.
- 3. Install the rear exhaust pipe.

## Note:

After installation, degrease the cushion rubber.



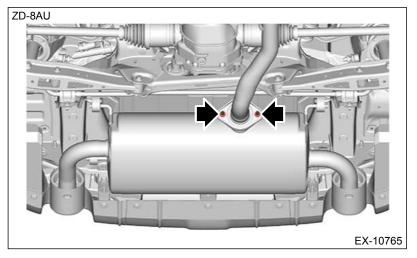
4. Using a new gasket, connect the rear exhaust pipe and muffler.

## Caution:

Be sure to use a new self-locking nut.

## **Tightening torque:**

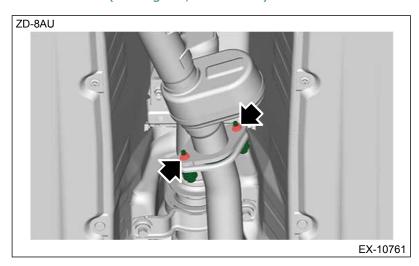
48 N·m (4.9 kgf-m, 35.4 ft-lb)



5. Using a new gasket, connect the center exhaust pipe and the rear exhaust pipe.

## **Tightening torque:**

18 N·m (1.8 kgf-m, 13.3 ft-lb)



## EXHAUST(H4DO) > Rear Exhaust Pipe

## **INSPECTION**

- **1.** Check that no leaks are found.
- 2. Check for deformation, damage, or excessive rusting.
- **3.** Check for any foreign matter adhered.
- **4.** Check for clogging.
- **5.** Check the cushion rubber for wear or crack.

## EXHAUST(H4DO) > Muffler

#### **REMOVAL**

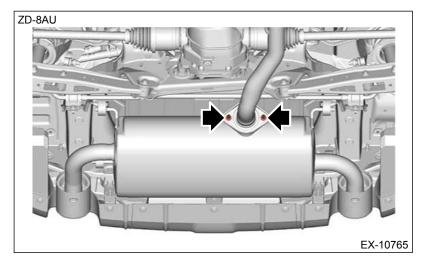




#### 1. MUFFLER

#### Caution:

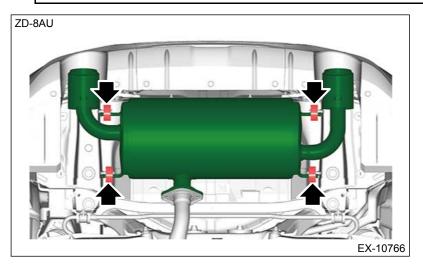
- Vehicle components are extremely hot immediately after driving. Be wary of receiving burns from heated parts.
- If the SUBARU genuine accessory is installed on the rear bumper, check the operation manual accompanied with the accessory.
- 1. Disconnect the rear exhaust pipe and muffler.



- 2. Apply a coat of spray type lubricant to the mating area of cushion rubber.
- 3. Remove the muffler.

## Caution:

Be careful not to let the muffler contact the rear bumper



4. Remove the muffler cutter. Remove the muffler cutter. Remove the muffler cutter.

5. Remove the cushion rubber.

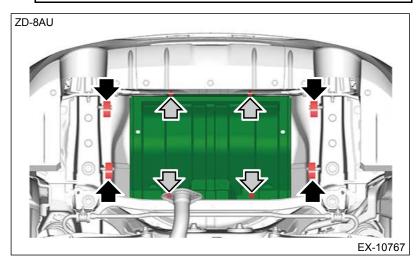
Note:

Perform this procedure only when required.

6. Remove the exhaust cover.

Note:

Perform this procedure only when required.

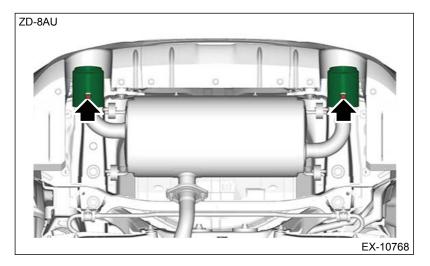


## 2. MUFFLER CUTTER

#### Caution:

Vehicle components are extremely hot immediately after driving. Be wary of receiving burns from heated parts.

1. Remove the muffler cutter.



EXHAUST(H4DO) > Muffler

## **INSTALLATION**

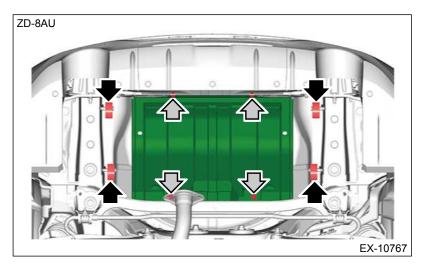
#### 1. MUFFLER

1. Install the exhaust cover.

## **Tightening torque:**

10 N·m (1.0 kgf-m, 7.4 ft-lb)

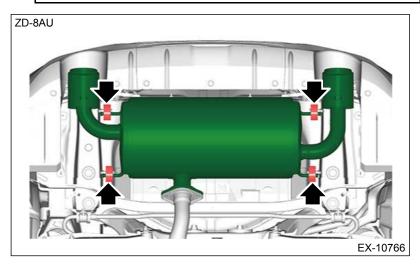
- 2. Apply a coat of spray type lubricant to the mating area of cushion rubber.
- 3. Install the cushion rubber.



- 4. Install the muffler cutter. Ref. to EXHAUST(H4DO)>Muffler>INSTALLATION > MUFFLER CUTTER.
- 5. Install the muffler.

## Note:

After installation, degrease the cushion rubber.



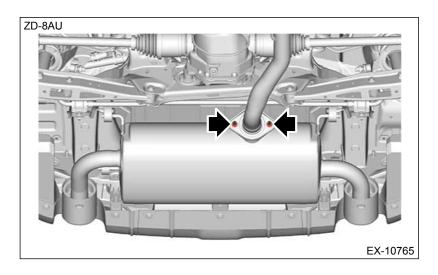
**6.** Using a new gasket, connect the rear exhaust pipe and muffler.

#### Caution:

Be sure to use a new self-locking nut.

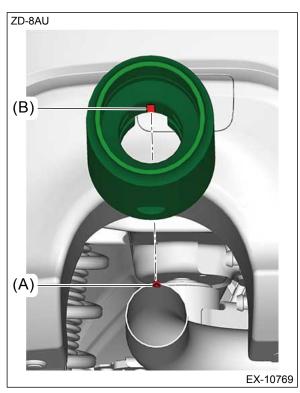
## **Tightening torque:**

48 N·m (4.9 kgf-m, 35.4 ft-lb)



## 2. MUFFLER CUTTER

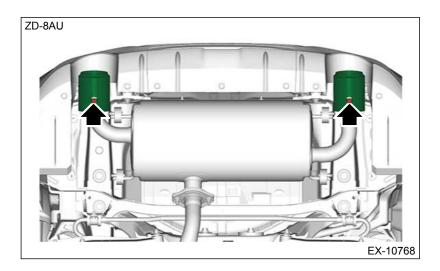
- 1. Install the muffler cutter.
  - (1) Align the cutout portion (B) of the muffler cutter with the protrusion portion (A) of the tail pipe and push it in to the end.



(2) Install the muffler cutter mounting bolt.

## **Tightening torque:**

7.5 N·m (0.8 kgf-m, 5.5 ft-lb)



# EXHAUST(H4DO) > Muffler

## **INSPECTION**

- 1. Check that no leaks are found.
- 2. Check for deformation, damage, or excessive rusting.
- 3. Check for any foreign matter adhered.
- 4. Check for clogging.
- **5.** Check the cushion rubber for wear or crack.